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REVIEW OF

BARGAINING AND GROUP DECISION MAKING:
EXPERIMENTS IN BILATERAL MONOPOLY

By Sidney Siegel and Lawrence E. Fouraker

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"Among all the behavioral sciences, economics is clearly the leader in the development of sophisticated and rigorous theory. The development of economic theory has far outstripped the development of empirical means for disposing of alternative hypotheses derived from theory.

"On the other hand, of all the behavioral sciences, psychology has given the greatest attention to the development of rigorous experimental methodology." (pp. 71-72).

The time is ripe, the authors of this book suggest, for an interdisciplinary union of these distinctive skills; and this product of their own collaboration (Professor Siegel is an experimental social psychologist) gives very persuasive support to their argument. Even those who have little direct interest in bargaining theory will find this pioneering work well worth their time, as an introduction to the methods and the considerable promise of "experimental economics."

Bargaining theory is a particularly suitable area for this joint approach. Most hypotheses in this field require, for their confirmation or rejection, a sort of data which non-experimental observation in the economic sphere simply has not provided. Diplomats in negotiation are forced to commit to writing, day by day, their current evaluations, fears, uncertainties, goals and proposed tactics, for the cable or diplomatic pouch; and occasionally this record is exposed to the public, providing

relatively usable data for the bargaining theorist, who is interested not only in what the decision-makers did, but in why they thought they were doing it, and what they saw as their alternatives. Unfortunately, General Electric does not publish a "White Paper" or a "Yellow Book" when negotiations with unions, suppliers or purchasers break down. Though anti-trust litigations, like war crimes trials, do furnish some tantalizing documentation on the bargaining process, an adequate trail of paper just does not exist; nor do union negotiators, like ambassadors, publish memoirs recounting their exact sequence of demands and expectations in a critical session.

Most bargaining theories refer to such variables as the information available to each bargainer, his "level of aspiration" (roughly, utility payoffs), his expectations; yet in the data usually available on economic transactions, the associated states of these variables cannot even be discovered, let alone controlled. A result has been some lack of interest in bargaining theory, which has offered for various problems whole sets of plausible but contradictory "solutions," with no evident hopes of choosing among them empirically. An experimental approach, offering means of measuring and manipulating these variables under controlled conditions, may make many old propositions operational at last, and some of them useful. Even more important (an advantage the authors might have stressed) may be its heuristic value, in suggesting new hypotheses and new dimensions to the bargaining problem.

In the hands of these authors, the method shows not only promise but results. Their data indicate strongly that bargainers under the simulated bilateral monopoly conditions tend to negotiate contracts at that quantity

which maximizes the joint payoff, and that dispersion around that amount can be reduced by increasing the amount of information possessed by the bargainers; moreover, the division of this joint payoff proved closely related to relative "levels of aspiration" and information. A reader who examines the experimental conditions, including the precise information given the subjects (particularly in the "incomplete information" case) will find the actual results for these and other cases more impressive than may appear here.

The experimental design seems careful and imaginative; in general, the skills of the experimenter show off to somewhat better effect than those of the theorist in this work. The abstract "bargaining model" proposed raises too many measurement problems, at this stage of investigation, to rise much above tautology. A major limitation on the results is that restrictions on communication (quite justifiable in these early experiments) rule out many forms of threat behavior, including "commitment"; this is probably a main reason (one the authors fail to suggest) for the fact that only one pair of subjects failed to reach a contract, and it may have influenced the pattern of contracts significantly.

The concept of "level of aspiration," borrowed from psychology, may prove a most fruitful addition to economic theorizing in this area; it can lead to testable and interesting hypotheses on the structure of utility payoffs in a particular situation (where only objective outcomes are known directly), on changes in that structure which may occur during and as a direct result of the bargaining process, and on a possible dependence of the utility function upon expectations.